

Name _____

Hour _____

Module 3 Quiz Review**Section 3:1 Square and Cubic Roots**

Find the square or cubic root of each. (2 pts each)

1) $\sqrt{0.36}$

2) $-\sqrt{100}$

3) $\sqrt{\frac{25}{81}}$

4) $\sqrt{4900}$

5) $\sqrt{b^2}$

6) $\sqrt{2500}$

7) $\sqrt[3]{64}$

8) $\sqrt[3]{27}$

9) $\sqrt[3]{125}$

Estimate WITHOUT using your calculator. (2 pts each)

10) $\sqrt{72}$

11) $\sqrt{3}$

12) $\sqrt{32}$

Section 3:2:1 Order of Operations

Evaluate each using order of operations. Round to the nearest hundredth when necessary. (2 pts each)

13) $\frac{5-13}{2^3}$

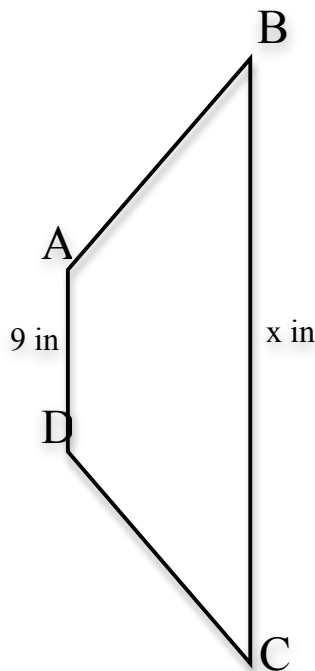
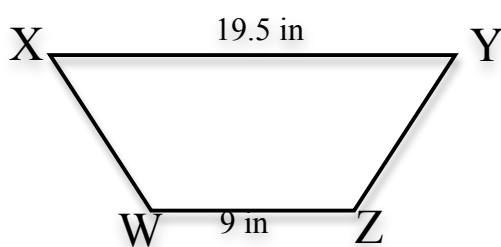
14) $12\sqrt{\frac{12}{56-8}}$

15) $8 + 2\sqrt{9 \bullet 4}$

16) $\frac{-2^3}{5(-2)}$

3:4:1 Similar Figures

The figures below are similar. Complete each statement. (1 point each)



17) $m\angle Y = m$ _____

18) $m\angle C = m$ _____

19) $\frac{XY}{AD} = \frac{\quad}{\quad}$

20) Find the length for x. (3 points)

3:5:1 Scientific Notation

Write each number in scientific notation. (2 points each)

21) In 2011 the world's population reached 7 billion. _____

22) The area of the Pacific Ocean is 166,000,000 km². _____

23) A piece from a meteorite was 0.00000007 m long. _____

Write each product in decimal notation. (1 point each)

24) On average, the ocean is about $3.795 \cdot 10^3$. _____

25) A red blood cell's diameter is $7.5 \cdot 10^{-3}$. _____

26) The approximate age of the Earth is about $4.5 \cdot 10^9$. _____

27) Your friend claims that $875.3 \cdot 10^4$ is written in scientific notation because it has a product of ten with an exponent. Do you agree or disagree with your friend? Explain your answer.

Integer Review

Evaluate the following expressions. (1 point each)

28) $-14 + (-20)$

29) $-11 \bullet 4$

30) $\frac{-120}{-6}$

31) $23 - 40$

32) $19 + -30$

33) $-7 \bullet -12$

34) $\frac{144}{-12}$

35) $15 - (-6)$

36) $|-40|$